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#### ABSTRACT

The quidance counselor is frequently seeking information from the classroom teacher about the overt behavior of a child in the classroom. In this study elementary school teachers were asked to rate their students on items describing specific observable classroom behaviors in two sessions with a two-week interval between ratings. The items used to rate students were determined in a pilot phase when elementary teachers were asked what concepts they considered important and not important for the satisfactory behavior of a child in the classroom. The results strongly indicated that teachers were not stable in rating the overt behaviors of pupils. The item reliabilities tended to increase as the number of rating categories available to the teachers increased from five to seven to nine; however, no statistical differences was found. Assuming that teachers do rate and possibly refer children to an elementary counselor based on a single episode, it would seem imperative that the elementary counselor determine as quickly as possible the generality of the behavior problem. (Author)

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Stability of Teacher Ratings of Pupil Behaviors in a Classroom Setting

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# STABILITY OF TEACHER RATINGS OF PUPIL BEHAVIORS IN A CLASSROOM SETTING

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The elementary counselor is responsible for obtaining information from both students and teachers about activities in the classroom setting. A great deal of work has been done at the elementary school level in the process of obtaining from pupils information that is accurate and stable over a period of time. Fortunately, procedures have been developed to assist us in data collection that will give the counselor information from pupils concerning their problems and the happenings in the classroom.

As a parallel to the investigation of the accuracy of pupil reports of behaviors and attitudes, we have done very little with respect to information that we are obtaining from teachers concerning activities in the classroom.

There seems to be an unwritten law that the information we obtain from teachers as it pertains to children's behavior in the classroom is accurate and transcends over the general classroom behavior of the child and does not focus upon a single episode. There has been limited research (Barnard, Zimbardo, & Sarason, 1968; Openshaw, 1967; Feshbach, 1969; and Tolor, Scarpetti, & Lane, 1967) in the area of investigating the stability and the accuracy



of teachers' ratings especially as the rating relates to pupil behaviors. In general, the results of the previous research have indicated that the teachers are not consistent in their ratings of pupil behavior.

The reasons for the lack of consistency in teacher ratings of pupil behaviors have been discussed from several viewpoints. Cronbach (1946, 1950) and Helmstadter (1957) have suggested that "response style" has an undesirable effect on the reliability of ratings. Although many researchers (Conklin, 1923; Symonds, 1924; Champney & Marshall, 1939; Bendig & Hughes, 1953; Bendig, 1954; Garner, 1960; and Eriksen & Hake, 1955a, 1955b) have investigated the optimal number of rating categories, and there is no conclusive evidence supporting any optimal number of scale categories. Block (1957) and others have observed that rating scales which do not encourage polarization or extreme responding have, in general, very poor reliability.

The previous research has placed the practicing counselor in a dilemma because the counselor is depending upon teacher observation of classroom behavior of children. If the teachers' ratings relate to a specific incident, then the expectations of the counselor and what the counselor is to do with the child are quite different than if the problem is an acute problem that transcends all of the child's behavior. Therefore, the counselor must be concerned with the type of information he is obtaining from the classroom teacher. Is



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the information stable with respect to a variety of situations such as misbehavior in the classroom, or is the teacher reporting information to the counselor based on a single episode in the classroom? If the information is obtained with respect to a specific episode, it would seem that the counselor is highly restricted in the type of behavior that might be expected in future performances of the child. Therefore, this study has been undertaken to attempt to determine if the information is accurate with respect to children's behavior in the classroom as rated by the classroom teacher.

#### Problem.

This study was designed to investigate the manner in which teachers respond to items measuring a concept judged important and to items measuring a concept judged not important by each teacher for five-, seven-, and nine-category rating scales. A consideration in this study was reliability of the items when employing five-, seven-, and nine-category rating scales, i.e., the consistency of teachers' responses to the same item on the three different rating scales over repeated administrations.

#### Method

## Subjects

The pilot sample consisted of twenty-nine elementary school teachers working toward an advanced degree at Southern Illinois University, Carbondale, Illinois. The sample for the major study consisted of ninety-four teachers from Southern Illinois public



and parochial elementary schools.

## Pilot Study

The first and second phases of the pilot study were conducted to develop the appropriate instruments for the major study. It was necessary to obtain concepts considered important and concepts considered not important to elementary school teachers for the satisfactory or acceptable behavior of the child in the classroom. Also, the pilot study was used to determine the concept that each of sixty items best measured or described as perceived by elementary school teachers. Sixteen concepts were included in the final version of the Characteristics Scale. The items, one measuring each of the concepts, were combined in the same order as the concepts they measured to form Behavior Rating Scales I, II, and III. These three rating scales were constructed using the same items but with the number of rating categories varied. Behavior Rating Scales I, II, and III were five-, seven-, and nine-category rating scales respectively. The rating categories were presented as a continuum from Strongly Agree to Strongly Disagree with a center category of No Comment.

# Data Collection Procedure

For the major study each teacher was randomly assigned to one of nine groups. Packets containing one copy of the Characteristics Scale, the appropriate number of Behavior Rating Scales I, II, or III, and the directions for the scales were distributed to the teachers by the experimenter



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during the scheduled meetings for the first testing period. The teachers were verbally instructed by the experimenter to open the packets of materials, read the written directions for the scales, and then ask questions. The Directions for the Characteristic Scale instructed each teacher to mark the concepts in one of two categories, Important or Not Important, according to his or her consideration of the characteristic (concept) for the satisfactory behavior of a child in the classroom. The Directions for Behavior Rating Scales instructed the teacher to place an "X" in the box along the continuum at the point which most nearly described the student being rated with reference to the behavior being considered. Each student in the teachers' class was rated on the Behavior Rating Scale by the teacher. For the first testing period, groups one, two, and three received Behavior Rating Scale I; groups four, five, and six received Behavior Rating Scale II; and groups seven, eight, and nine received Behavior Rating Scale III. Two weeks after the first set of materials was collected, an appropriate number of one of the three Behavior Rating Scales was distributed to each teacher individually by the experimenter with the same written directions as the first testing period. The teachers were not aware that they were going to be asked to complete the materials this second time. Therefore, there was no reason for the teachers to retain the ratings they had given the first time. During the second



Rating Scale I; groups two, five, and eight received Behavior Rating Scale II; groups two, five, and eight received Behavior Rating Scale II; and groups three, six, and nine received Behavior Rating Scale III. Of the 94 teachers in the original sample, 87 completed the study.

#### Results

The data obtained from the first and second testing periods for teachers in groups one, five, and nine were used to determine if teachers respond consistently over time to each item on a five-, seven-, or nine-category rating scale. The Pearson product-moment correlation coefficients were computed to determine the item reliability for each teacher in groups one, five, and nine for each of the sixteen items on the five-, seven-, and nine-category rating scales. These correlation coefficients were converted using Fisher's logarithmic transformation of r to  $z_r$  values which were averaged to obtain a  $z_r$  for each item on each of the five-, seven-, and nine-category rating scales. The obtained average  $z_r$  values were then converted to Pearson product-moment correlation coefficients as shown in Table 1.

Insert Table 1 about here

The statistical hypotheses that population correlation coefficients were not different from zero for each item on each of the rating scales were retained at the .05 level of



significance with the exception of Item 1. The results indicate, therefore, that teachers in this study did not respond consistently over a short period of time (two weeks between testing periods) when they rated each student in their classrooms on each of sixteen items describing specific behaviors related to a classroom setting.

The problem of determining the optimal number of rating scale categories is conceptually related to the consideration of stability of responding over time. In this study a number of questions were generated concerning this relationship. Is each item on a seven-category rating scale more reliable over repeated administrations than the corresponding item on a five-category rating scale? Is each item on a nine-category rating scale more reliable over repeated administrations than the corresponding item on a seven-category rating scale? Is each item on a nine-category rating scale? Is each item on a nine-category rating scale more reliable over repeated administrations than the corresponding item on a five-category rating scale? The obtained  $z_r$  values were used to test the statistical hypotheses that two populations have the same  $\rho$ -value. The results are shown in terms of z values in Table 2.

Insert Table 2 about here

The hypotheses were retained at the .05 level of significance.

The results indicate that there is no statistically significant difference in the item reliability of (a) each item on a



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five-category rating scale and the corresponding item on a seven-category rating scale, (b) each item on a seven-category rating scale and the corresponding item on a nine-category rating scale, and (c) each item on a five-category rating scale and the corresponding item on a nine-category rating scale. Although the statistical analysis indicated that the number of categories on the rating scale did not affect the reliability of the teachers' ratings of their students on specific overt behaviors, a visual observation of the reliability coefficients for each item indicated that the reliability of responding increased as the number of rating categories available to the teachers increased. The data suggested this trend; however, the trend was not analyzed statistically in this study.

#### Discussion

The results of this study clearly indicate that the teachers' ratings of pupil behaviors over a short time period are not stable. The study was developed such that behaviors judged important by the elementary teachers were included. Even the isolation of behaviors judged important did not tend to stabilize the ratings.

The results indicate that the teachers are not rating the general behaviors of the children on the rating sheets.

The teachers may very well be focusing upon a specific episode involving a child when responding to a rating scale.

If this is true, a serious implication for elementary counselors evolves. If referral rating sheets are completed based on a



single cpisode, the elementary counselor is being placed in the role of a disciplinarian and not the role of a counselor. The counselor cannot be expected to assist the child if the counselor is fulfilling the role of a disciplinarian.

Assuming that teachers do rate and possibly refer children to an elementary counselor based on a single episode, it would seem imperative that the elementary counselor determine as quickly as possible the generality of the behavior problem. If the behavior problem is specific to a single episode, the counselor should not have the responsibility of dealing with the observed behavior. The counselor should only be involved after the general nature of the behavior problem has been established.



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# Footnotes

- 1. Copies are available upon request from the senior author.
- 2. Copies are available upon request from the senior author.



Table 1

Item Reliability Averaged Over Teachers In Groups One,
Five, And Nine For Each Of The Sixteen Items On The
Five-, Seven-, And Nine-Category Rating
Scales, Respectively

	Five-Category	Seven-Category	Nine-Category
Item	Rating Scale	Rating Scale	Rating Scale
1	.455	.600*	.575*
2	.020	.055	.095
3	035	.095	. 200
- 4	. 190	. 265	. 240
5	.045	.055	. 180
6	.335	.345	.455
7	.070	.080	.215
8	020	.075	. 190
9	. 200	. 145	. 140
10	060	. 100	<b>0</b> 50
11	045	.095	. 195
12	.025	.080	035
13	.060	. 235	. 155
14	.035	. 160	.045
15	. 115	. 190	. 280
16	050	.225	. 140

<sup>\*</sup>A sample correlation value of .549 was required for the statistic to be significant at the .05 level of significance.



Table 2
z-Values Obtained From Testing The Hypotheses That
Two Rating Scales With Different Number Of
Categories Have The Same Item Reliability

	<del>-</del>				
	Five Categories	Seven Categories	Five Categories		
ltem	vs.	vs.	vs.		
	Seven Categories	Nine Categories	Nine Categories		
1	38	+.07	30		
2	07	07	14		
3	25	20	44		
4	15	+.05	10		
5	02	24	26		
6	02	25	27		
7	02	26	28		
8	19	21	41		
9	+.10	+.01	+.11		
10	30	+.29	02		
11	27	19	46		
12	10	+.22	+.12		
13	34	+.16	18		
14	14	+.21	+.07		
15	15	17	32		
16	52	+.17	36		

## DIRECTIONS FOR CHARACTERISTICS SCALE

- Print your full name, the name of the elementary school in which you are teaching, and the city in which the school is located on the attached sheet. Be sure to indicate the grade you are presently teaching.
- 2. Please read the characteristics carefully. This list of sixteen characteristics was determined by a group of elementary school teachers who considered some of the characteristics to be important and others to be not important.
- 3. Indicate by a check mark (✓) the characteristics, listed on the attached sheet, that you consider important and not important considerations for the satisfactory (or acceptable) behavior of a child in the classroom.
- 4. In order to determine whether a characteristic is important or not important to you, think in terms of the characteristics of pupils you enjoy teaching. The word "behavior" does NOT refer to academic success; it refers to how the child ACTS in the classroom.
- 5. There is no time limit.



# CHARACTERISTICS SCALE

			Name
			School
			City
			Grade You Are Teaching
IMPORTANT	NOT IMPORTANT		CHARACTERISTICS
		1.	Aggressive, tends toward fighting, bullying, teasing, cruelty, vs. non-aggressive, kind, considerate.
		2.	Demanding of teacher's attention, vs. prefers not to be noticed.
		3.	Of generally good health, vs. poor general health.
		4.	Irresponsible, frivolous, vs. responsible.
		5.	Self-assertive, tends to dominate other children, vs. submissive, follows lead of other children.
		6.	Popular, generally liked by other children, vs. unpopular, generally disliked by other children.
		7.	Cooperative, compliant, courteous with children and adults, vs. negativistic, stubborn, disobedient, discourteous, argumentative, "poor sport".
<del></del>		8.	Good posture, vs. poor posture.
		9.	Self-centered, conceited, boastful, "show-off", vs. self-abasive, deferent, minimizes own importance.
<del>مانىـــــد</del> ىائىـ		10.	Associates primarily with children of own sex, vs. associates primarily with children of opposite sex.
		11.	Physically strong, vs. physically weak.
-		12.	Stable in interests, attitudes, opinions, vs. changeable.
	***************************************	13.	Gregarious, prefers games involving many children, vs. prefers solitary pursuits.
		14.	Quiet, vs. talkative, distracting in class.
		15.	Good tonal quality of voice, vs. bad tonal quality of voice.
		16.	Learns fast, vs. learns slowly.

## DIRECTIONS FOR BEHAVIOR RATING SCALES

This inventory consists of sixteen statements designed to sample your opinions about your pupils and their behavior in the classroom. There are no right or wrong answers except that they are your own opinions. What is wanted is your own individual feeling about each student for the statements. Read each statement and decide how YOU feel about it.

Place an X in the box, X, along the continuum Strongly Agree to Strongly Disagree at the point which most nearly describes the student with reference to the BEHAVIOR you are considering. PLEASE RESPOND TO EVERY ITEM.



# BEHAVIOR RATING SCALE I

		Stu	dent's Name	
1.	teases other pupils.			
Strongly Agree		No Comment		Strongly Disagree
2	demands the teacher's atte	ntion.		
Strongly Agree		No Comment		Strongly Disagree
3.	has poor general health.			
Strongly Agree		No Comment		Strongly Disagree
4	is irresponsible.			
Strongly Agree		No Comment		Strongly Disagree
5	dominates other children.			
Strongly Agree		No Comment		Strongly Disagree
6	is unpopular.			
Strongly Agree	/a disabadiana	No Comment		Strongly Disagree
·	is disobedient.		garan salaming	
Strongly Agree		No Comment	<u> </u>	Strongly Disagree
·	has poor posture.			<b></b>
Strongly Agree		No Comment	لـــا	Strongly Disagree
9.	is a snow-orr.		·	<b></b>
Strongly Agree		No Comment		Strongly Disagree
10.	associates primarily with o	children of oppo	osite sex.	
Strongly Agree		No Comment		Strongly Disagree
11	is physically weak.			
Strongly Agree		No Comment		Strongly Disagree
12.	is changeable.	•		
Strongly Agree		No Comment		Strongly Disagree
13.	prefers games involving mar	ny children.		
Strongly Agree		No Comment		Strongly Disagree
· · ·	is distracting in class.		·	<del></del> 1
Strongly Agree		No Comment		Strongly Disagree
'	s voice has bad tonal quali		**************************************	
Strongly Agree	learns slowly.	No Comment		Strongly Disagree
Strongly Agree		No Comment	□ 1 <b>9</b>	Strongly Disagree



# BEHAVIOR RATING SCALE II

			Student's	s Name			
1.	teaaes other pup	ils.					
Strongly Agree			No Comment	. 🗀		Strongly Di	] sagre
2	demands the tead	cher's attent	ion.				
Strongly Agree			No Comment			Strongly Dis	] sagree
3	has poor general	health.					
Strongly Agree			No Comment			Strongly Dis	] sagree
4	_ is irresponsible	••					
Strongly Agree			No Comment			Strongly Dis	] sagree
5	_ dominates other	children.					
Strongly Agree		[]	No Comment			Strongly Dis	] sagree
6	_ is unpopular.						
Strongly Agree			No Comment			Strongly Dia	] sagree
7	is disobedient.						
Strongly Agree			No Comment			Strongly Dis	] sagree
8	has poor poature	·•					
Strangly Agree			No Comment			Strongly Dis	] sagree
9.	is a show-off.	,	•				
Strongly Agree			No Comment			Strongly Dis	] sagree
10.	associatea prima	rily with ch	ildren of opposite	sex.			
Strongly Agree			No Comment			Strongly Dia	□ sagree
11	is physically we	ak.					
Strongly Agree			No Comment			Strongly Dia	] sagree
12.	is changeable.						
Strongly Agree			No Coment			Strongly Dis	] sagree
13.	prefera games in	volving many	children.		٠		
Strongly Agree			No Comment			Strongly Dis	] sagree
	is distracting i	n class.					
Strongly Agree			No Comment			Strongly Dia	] sagree
15.	's voice has bad	tonal quality	у.				
Strongly Agree			No Comment			Strongly Dia	sagree
16.	learns slowly.	•			20		
Strongly Agree			No Comment			Strongly Dia	]

# BEHAVIOR RATING SCALE III

		Student's Name						
1.		teases oth	er pupils.					
Str	ongly Agree				No Comment			Strongly Disagree
2.		demands th	e teacher'	s attenti	on.			
	ongly Agree				No Comment			Strongly Disagree
3.		has poor g	eneral hea	1th.				
	ongly Agree				No Comment			Strongly Disagree
4.		is irrespo	nsible.					
	ongly Agree				No Comment			Strongly Disagree
5.		dominates	other chil	dren.				
	ongly Agree				No Comment			Strongly Disagree
6.		is unpopul	ar.			•		
	ongly Agree				No Comment			Strongly Disagree
7.		is disobed	lient.					
Str	ongly Agree				No Comment			Strongly Disagree
8.		has poor p	osture.					
	ongly Agree				No Comment			Strongly Disagree
9.		is a show-	off.		•			•
Str	ongly Agree				No Comment			Strongly Disagree
10.		associates	primarily	with chi	ldren of opp	osite sex.		
Str	ongly Agree				No Comment			Strongly Disagree
11.		is physics	lly weak.					·
	ongly Agree				No Comment			Strongly Disagree
12.		is changes	ble.					
	ongly Agree				No Comment			Strongly Disagree
13.		prefers ga	mes involv	ing many	children.	•	-	
	ongly Agree				No Comment			Strongly Disagree
14.		is distrac	ting in cl	288.				
	ongly Agree				No Comment			Strongly Disagree
13.		·s voice ha	s pag tona		·	<b></b>		
	ongly Agree	learne ele	L]		No Comment		لــا	Strongly Disagree
<b>.</b>				<del></del>	<del></del>	<del></del> 1	<del></del>	
Str	ongly Agree		لــا		No Comment	لـــا	7 لــا	Strongly Disagree

